

Rapid Prototyping Lab Recharge

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Rapid Prototyping Lab

- Is within Design Works. Rapid Prototyping is an additive process that can generate physical, three-dimensional parts of arbitrary shape directly from 3D computer aided design (CAD) data.
- These parts are commonly used by designers, engineers, and scientists for low-volume production, prototyping, and mold mastering.

Goal

- To provide a more precise allocation of costs to users based on the benefits they receive
- To ensure equitable costing that complies with Cost Accounting Standards

How the Recharge Rates are Calculated

- Cost structure is based on a market survey.
- \$30 per cubic inch of part volume + \$1 per cubic inch of “bounding box” volume + \$100 flat rate setup per job. See example below:

	Part Name	Part volume (cubic inch)	Bounding box volume (cubic inch)	Cost (dollars)
1	LHC tank	18	171.0	\$811
2	LHC pipe	2	76.1	\$236
3	Bearing cage	0.5	2.8	\$118
4	Helical guide	1.5	5.0	\$150
5	Logo (small)	2	2.4	\$162
6	Logo (large)	15	19.3	\$569
7	Neutron generator shell	17	253.6	\$864
8	Protein model 1 HCK	11.2	216.0	\$652

Distribution Base

- The costs associated with the Rapid Recharge Lab are:
 - .50 FTE per month
 - Monthly equipment lease expenses on two machines
 - Monthly maintenance expenses on two machines
 - Misc. supplies

What's Different

- Currently, employees charge directly to a project and a \$14.90 hour recharge also is charged directly to the project.
- Under the new fix rate, the customer gets charged a fixed rate for that job.
- The cost associated with that job is charged via a Rapid Prototyping Recharge.
- The revenue for that job is collected in a Rapid Prototyping Recharge project and the employee charges directly to the recharge project along with other expenses.

Resource Category

- The Rapid Prototyping Lab will be identified by resource category 54200